

**PISTON AND CONNECTING ROD ASSEMBLY HAVING PHOSPHATIZED
BUSHINGLESS CONNECTING ROD AND PROFILED PISTON PIN**

ABSTRACT OF THE DISCLOSURE

The present invention relates to a connecting rod and piston pin assembly for an internal combustion engine to improve wear of the piston/connecting rod pivot point and reduce deformation of the pin bore. To this end, the assembly includes a piston having a pin bore, a connecting rod having a bore adapted to be aligned with the piston pin bore and piston pin interconnecting the piston and the connecting rod through engaging their respective bores. The piston pin has a profiled outer circumference that is substantially circular in cross-section with a larger diameter at the distal ends than at the center portion. One end of the connecting rod includes a phosphatized coating and is adapted to facilitate movement between the connecting rod bore and the profiled piston pin.